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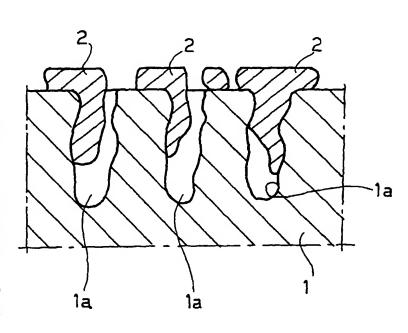
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(54) Title: JUNCTION FOR PHOTOVOLTAIC CELLS, OPTICAL SENSORS OR THE LIKE



(57) Abstract: A junction for photovoltaic cells, optical sensors or the like comprises a microporous or nanoporous silicon layer and a metal or semiconductor layer deposited so as to fill at least partially the pores of the silicon layer.

INTERNATIONAL SEARCH REPORT

IB 03/06283 A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H01L31/07 H01L31/108 H01L31/028 H01L31/18 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC 7 - H01LDocumentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data, INSPEC

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
х	ÜNAL BAYRAM ET AL: "Spectral response of porous silicon based photovoltaic devices" JOURNAL OF APPLIED PHYSICS, AMERICAN INSTITUTE OF PHYSICS. NEW YORK, US, vol. 87, no. 7, 1 April 2000 (2000-04-01), pages 3547-3553, XP012049781		
Α	ISSN: 0021-8979 page 3548, column 2, paragraph 2	8-10	
χ	US 4 990 988 A (LIN ET AL)	1-3,6,7	
Α ·	5 February 1991 (1991—02—05) column 3, line 28 — line 30; claim 1; figure 1c column 2, line 31 — line 37 column 3, line 24 — line 25	8-10	

X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the International filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the International filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family
Date of the actual completion of the international search 22 February 2005	Date of mailing of the international search report 01/03/2005
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patent Iaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ni, Fax: (+31-70) 340-3016	Authorized officer Roy, C

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		1B U3/U0283		
C.(Continu	ation) DOCUMENTS CONSIDERED TO BE RELEVANT			
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
A	HALIMAOUI A ET AL: "COVERING AND FILLING OF POROUS SILICON PORES WITH GE AND SI USING CHEMICAL VAPOR DEPOSITION" JOURNAL OF APPLIED PHYSICS, AMERICAN INSTITUTE OF PHYSICS. NEW YORK, US, vol. 78, no. 5, 1 September 1995 (1995-09-01), pages 3428-3430, XP000541607 ISSN: 0021-8979 paragraph '0001!	1,7		
A	Paragraph '0001! VERNON S M ET AL: "HIGH PERFORMANCE POROUS SILICON SOLAR CELL DEVELOPMENT" WORLD CONFERENCE ON PHOTOVOLTAIC ENERGY. WAIKOLOA, DEC. 5 - 9, 1994, NEW YORK, IEEE, US, vol. VOL. 2 CONF. 1, 5 December 1994 (1994-12-05), pages 1583-1586, XP000680126 ISBN: 0-7803-1460-3 figure 1	. 1,7		

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US	4990988	Α	05-02-1991	NONE			